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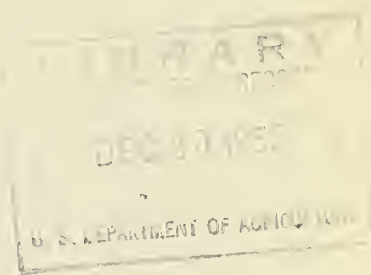


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# MARKETING ACTIVITIES

DECEMBER 1955

Volume 18, No. 12



WINTER MEAL  
NOW



WINTER MEAL  
THEN



UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Marketing Service      Washington, D. C.

**Winter Meal - Now and Then**

Cover

The photo of the 1955 woman planning a winter meal from prepackaged foods in a supermarket and the other photo of a woman making similar plans from her own cellar supplies illustrate one of the most marked changes in our pattern of living during the past 20 years. Homemakers during the last two decades have sought from the processing and distributing industries services that have resulted in a tremendous expansion of the Nation's food-marketing system.

**Washing Potatoes for Profit**

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Merchandising methods which not only move more potatoes but result in extra profits for retailers who sell washed potatoes, are described by Hugh Smith and Bill Hoofnagle, of USDA's Marketing Research Division, and Wayne Lee, professor of marketing, Pennsylvania State University.

**NAMO Meeting At Madison**

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A summary of speeches and panel discussions of the last two days of the 36th Annual Meeting of the National Association of Marketing Officials, held in Madison, Wisconsin. A report on the first two days of the meeting appeared in the November issue of this publication.

**Bill for Marketing Farm Foods Continues Slow Rise**

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Forrest Scott, agricultural economist, Market Organization and Costs Branch, USDA, spotlights some of the more important trends taking place in the marketing of farm food products. The charts and text in the article are reprinted from AGRICULTURAL OUTLOOK CHARTS, 1956.

**Truck Transportation Barriers, 1955**

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USDA's Transportation and Facilities Branch is currently engaged in a long-range project to evaluate the economic effects of truck transportation barriers. Hugh Norton, transportation economist, describes some of these barriers and how they came about.

**Improved Methods of Displaying Produce on Wet Racks**

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The time required to display produce on iced wet racks in retail food stores can almost be cut in half by the use of improved display methods, according to tests conducted by the Wholesale and Retail Section, Agricultural Marketing Service, in two Food Fair supermarkets located in Miami, Fla. The author, Mr. Hapner, is a USDA industrial engineer.

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# Washing Potatoes For Extra Profit

By W. A. Lee, William S. Hoofnagle, and Hugh M. Smith

Washing increased appreciably consumer acceptance of Pennsylvania potatoes and increased profits as much as 33 cents per bushel in sales experiments conducted during the 1954 marketing season. Packaging in polyethylene bags resulted in still further increases in sales.

Two different sales experiments were conducted during the 1954 marketing season to determine the extent to which washing would influence sales and prices in marketing potatoes. These experiments were conducted in 12 supermarkets in Pittsburgh, Pa., through a cooperative research project between USDA's Agricultural Marketing Service and Pennsylvania State University.

A Pennsylvania grower supplied the potatoes. Washing equipment, consisting of a combination washer and water extractor unit, and bags were supplied by private industry. Over 6,000 bushels of potatoes were handled during a 3-month period.



Sales increased nearly three-fourths over the usual display of unwashed potatoes when washed Pennsylvania potatoes were offered both in paper and in polyethylene bags.

## Customers Will Pay Difference In Price

Customers desire different things in potatoes and will pay differences in price to obtain them. These differing wants raised the question as to whether profits could be increased by separating potatoes through such practices as washing, using transparent packages, sizing, and perhaps even waxing.

When washed potatoes, priced at a 4 cents per pack premium, and unwashed potatoes were displayed separately sales were not significantly different. At this same price premium, a combination display of washed and unwashed increased sales about one third. There was no significant difference in sales from the combination and single displays when the premium for washed potatoes was increased to ten cents per peck.

In each experiment four methods of merchandising potatoes were tested. The effectiveness of each was based on total sales for each method in a 4-week period involving the 12 stores in a rotational experimental design. Washed potatoes were offered both in the usual type of open-window paper bags and in polyethylene bags permitting greater visibility of the washed product.

Sales were not significantly different in either experiment when only one lot of Pennsylvania potatoes were offered, either unwashed at competitive market prices or washed at a premium of 4 cents per peck. In the first experiment, sales of Pennsylvania potatoes were slightly over 30 pounds per 100 customers when only one lot was offered. In the second experiment sales were approximately 25 pounds per 100 customers.

### Sales Increased With Combination Display

Sales increased to slightly over 40 pounds per 100 customers--about a third increase--when a combination display of washed and unwashed was offered in the first experiment, with the washed selling at a 4-cent premium. The amount of space allocated to potatoes in combination displays were approximately equal to the single-type display.

About half of the sales from the combination display were washed. When the price premium for washed potatoes was increased to 10 cents per peck, sales declined to 34 pounds per 100 customers.

This was not significantly different from the sales resulting from a display of unwashed potatoes. The proportion of washed sales declined to about 40 percent. Under typical cost conditions, the extra profits on these washed potatoes would be about 33 cents per bushel.

In the second experiment, sales increased to nearly 33 pounds per 100 bushels when a single lot of washed potatoes was offered in 10-pound polyethylene bags. These potatoes were priced at two-thirds the price of washed pecks, plus a 2-cent premium per bag to take care of the extra cost of packing in 10-pound bags. Sales increased to 44 pounds per 100 customers for the combination display of washed potatoes both in window paper bags and in polyethylene bags.



# NAMO Meeting At Madison

The 36th Annual Meeting of the National Association of Marketing Officials was held at Madison, Wisconsin, September 27-30, this year. A report on the first two days of the meeting appeared in the November issue of this publication. Here is a digest of the concluding sessions.

Joseph H. Meek, of Virginia, discussed inspection and grading at poultry dressing plants. Citing his experience in Virginia, he said the inspection situation is confused. As a result, grading is seriously handicapped. Mr. Meek advocated the use of lay inspectors under close supervision of veterinarians at the State level. But, he said, attempts to accomplish this between the early 1940's and early 1950's were never agreed to by Federal officials.

Mr. Meek told the group that he felt one problem that needs attention is that of preventing misrepresentation of inspected poultry to the consumer. He said the fact that poultry has been inspected should not be used as a factor of quality.

Wallace Jerome, turkey grower and processor of Barron, Wis., also looked at inspection and grading from a State viewpoint. He pointed out that the chain stores are handling a greater percentage of volume each year. They buy not only in 1-carload lots but in 10- and 20-car lots, often going directly to the processor for them. "Most of the big chains are quality buyers," he said. "They will handle nothing but U.S. Grade A and government inspected--now commonly called G.I. Pack."

Mr. Jerome described the large investment required of the turkey processor, the larger volume required to support the investment, the "brand consciousness" of the housewife, and the expense entailed in meeting health and sanitary requirements. "But I believe," Mr. Jerome said, "that grading and inspection puts the processor in a good competitive position on the price and quality he delivers to the consumer, and on the price he pays the producer. I believe that plants inspected for wholesomeness should also have the Federal grades."

Spencer Duncan, of New York, discussed sanitation and inspection work in New York. "Our principal objective has been," he said, "to try--if we could--to prevent cities in New York from setting up codes which are, in reality, nothing less than trade barriers. Our Department of Agriculture and Markets, in cooperation with our College of Agriculture, sought (1) to offer cities a workable program enforced at the State level, (2) to attempt to prevent wide variations in sanitation code writing that would result in undue hardships, and (3) to furnish a temporary code that could be utilized until such time as the contemplated Public Health Service code was completed."

## Uniform Inspection Program for Poultry

Hermon I. Miller, of AMS, traced the development of interest in a uniform inspection program for poultry. He said that the thinking of Public Health officials and of the poultry industry during the last 3 years has just about paralleled Federal thinking on a sanitary code.

Mr. Miller pointed out that in contemplation of a compulsory inspection program much consideration has been given to the amount of poultry that moves in interstate commerce. Such a program, he said, has also been of interest to farm groups and to butchers' unions. He said there has been considerable discussion among all of these people on how such a program, if put into operation, should be administered and financed.

The development of a plan for a uniform grading program has also provoked interest. At the same time Mr. Miller noted the widespread development of local regulations of the marketing of poultry. "When we look at this picture of local regulation I believe it is apparent to most of us that what we need particularly is uniformity in these codes of sanitary regulations. We need something with which we can all work."

## Handling and Distributing Perishables

Matt Jennings, Chief of Bureau of Markets, Tennessee Department of Agriculture, opened the panel discussion on improved practices in the handling and distribution of perishable agricultural products.

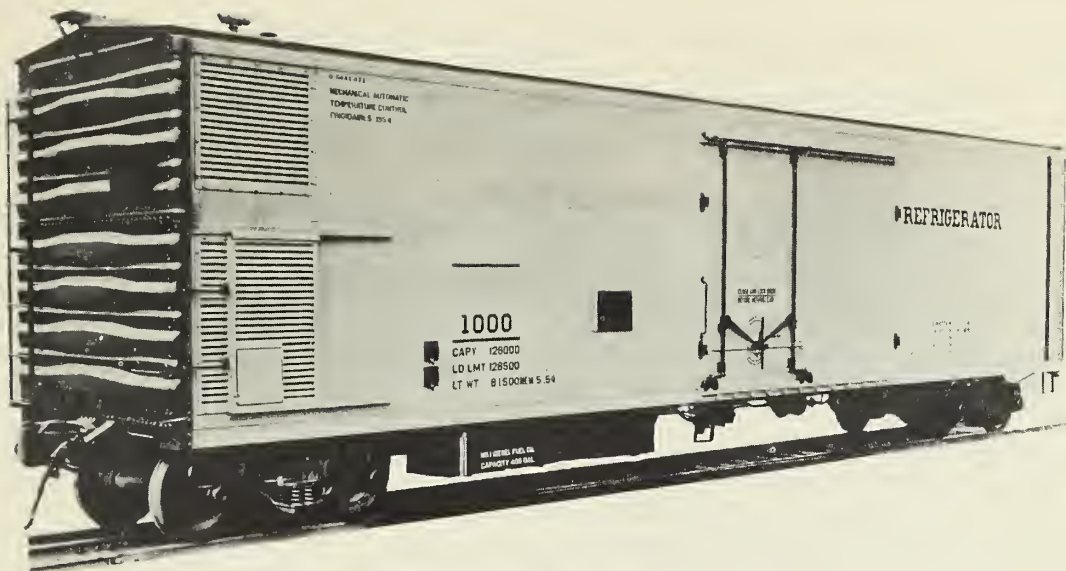
Louis A. Webster, of Massachusetts, thought handling practices have improved generally. With these improvements have come better quality products in the markets and resultant increases in consumption. Putting more and more fruits and vegetables in consumer packages at the farm or packing house is helping quality improvement, he said.

John C. Winter, of USDA's Agricultural Marketing Service, discussed research work of the Transportation and Facilities Branch in the development and evaluation of less expensive and improved containers. "Our packaging research in AMS is pointed toward two objectives: (1) We want to increase the salability of fresh produce, and (2) we want to develop cheaper containers and those which increase the efficiency of marketing produce. You people can be of immeasurable help in this program by carrying the results of our research into your States."

H. W. Poulsen, of California, discussing State standard container laws, expressed the need for laws flexible enough to allow for shipment of products in experimental containers. "I think this should hold in all States, for packaging methods change from day to day," he said.

W. A. Wumsch, of New Mexico, noting progress made in prepackaging of fresh produce, told the group that the consumer holds the reins on quality. "It's been presentation of quality products to the buying public that has stepped up the sale of prepackaged products."





### Mechanical Refrigerator Car

H. R. Hudgens, Jr., of the Chicago, Burlington, and Quincy Railroad, described the research program that resulted in the development of the mechanical refrigerator car. "The first mechanical cars developed were designed and used primarily to transport frozen commodities," Mr. Hudgens said. "But after we met the initial demand for frozen food loading we continued our program of making the mechanical car a satisfactory vehicle for all types of perishable commodities, in addition to those requiring low temperatures. The "all purpose" mechanical car was the result.

"The "all purpose" mechanical cars will maintain desired temperature between zero, or lower, and 70° F. and are equipped to prevent dehydration of fresh commodities. However, all the mechanical cars now available are needed for frozen food shipments requiring zero-in-transit temperatures. Their use in handling fresh fruits and vegetables has so far been limited to test shipments. However, mechanical cars ultimately will replace ice bunker refrigerator cars."

### Vehicle Standardization

John B. Hulse, of the Truck-Trailer Manufacturers Association, Inc., told the marketing officials of the work in vehicle standardization pursued by the trucking industry. He pointed out that this work was necessary if tractors and trailers were to be interchanged freely from coast to coast, and stay within the 45-foot overall length limit imposed in some States. He said a joint industry committee a year ago agreed on recommended vehicle dimensions which apportioned the 45-foot overall space between the tractor and trailer, leaving the necessary clearance space between the two units, and providing for a full, 35-foot trailer.

Mr. Hulse also described bulk hauling of milk and of fresh citrus juice in newly developed tank trucks. He said the trucking industry would require an additional 6,000 tank trucks and trailers for milk hauling alone in the next 6 years.

Speaking on changes in handling meat at retail, Claybourne B. Ross, agricultural counsel for the A & P food stores, said the 40 to 60 possible individual cuts of a beef carcass are grouped nowadays in the self-service store into about 10 major cuts. This has come gradually, with prepackaging speeding the process of evolution.

### Compulsory Grading and Inspection

Charles O. Moser, of Denver, told the group that the Colorado compulsory fruit and vegetable grading and inspection law has been beneficial to the grower, shipper, carrier, and consumer. "This service works in very nicely with marketing agreement and order programs. One of the most important purposes of these programs is to control quality of the product shipped. Since all Colorado products are inspected and certified as to grade and size, our volume is great enough to bring in enough revenue to support the service from the fees received. Volume also helps keep low the fee we charge."

Harvey Weavers, of Wisconsin, discussing the mandatory grade labeling of butter sold at retail in that State, explained the mechanics of the operation of the program, and how the legislation came about at the insistence of farm organizations and consumer groups.

Miles Nelson, of Michigan, described the State's "closed package" law to the group. This law prevents misrepresentation in the grading or packing of fruits and vegetables sold in Michigan and compels certain labeling requirements to be met. It helps materially in doing away with the practice of over-facing. Even an "open crate" becomes a "closed package" under this law, and it becomes effective as soon as the product is packed and intended for sale on the open market.

### Marketing Livestock Efficiently

Mancil J. Vinson, who served as chairman of the panel on marketing livestock efficiently, spoke of Kentucky's livestock marketing program, and of the rapid growth of livestock auction markets in that State. He said that as livestock has become increasingly important, the problem in Kentucky has come now to be more one of marketing than of production.

D. T. Westerdahl, of AMS, in charge of the South St. Paul office of the Market News Service, discussed the topic "Effective Grading of Market Cattle" and described the work of a market reporter. He also told the group that the market today is seeking the lean-type hog.

Clyde Spry, of Iowa, described the mechanics of selling through an auction market in his State. He told the marketing officials that the approximately 180 salesbarns in Iowa hold auctions once a week, and that a third of them hold auctions twice a week.

Robert F. Thayer, of Wisconsin, described the marketing of lambs through a pool. He said the first pool was formed in 1954, for lambs, and that thought is now being given to its use for market hogs and feeder cattle.



"In Wisconsin, our lamb pools have been organized with the express purpose of improving a depressed market. By grouping individual producer's livestock into a uniform package, a better command of the price can be obtained," Mr. Thayer said.

Roy Ormond, of the Oscar Mayer Co., Madison, Wis., discussed the increasing trend of selling livestock direct to the packer. "Movement of packing plants into the areas of livestock production seems logical. It lessens some of the losses and some of the expenses entailed in shipping livestock longer distances. It cuts down bruising, death losses, tissue shrink, and enroute feeding costs. Furthermore, byproducts such as fertilizers and livestock feeds are left in the areas of livestock production. With present day truck and railcar refrigeration it is more economical to ship meat than to ship livestock out of the areas of production and into the areas of consumption.

R. H. Steidl, representing Equity Cooperative Livestock Sales Assn., Milwaukee, described the operation of selling through a commission firm. "We organized in 1922 when nearly all the Wisconsin packers were located in Milwaukee. This seemed the logical place for farmers to concentrate their livestock and offer it for sale. It was the point of greatest demand, where competition would be keenest. But the picture has changed.

"Many small slaughterers who originally supplied meat for a few local meat markets remodeled and enlarged their plants and greatly increased their volume. Other packers diversified their operations to be closer to the source of supplies. We changed our operations also; we now have branch markets surrounded by submarkets.

"Times change, and we must change with them. Consumers now want leaner pork. The answer is the meat-type hog. Many farmers like to sell their livestock close to home. The answer is to furnish them the facilities so they can sell their livestock close to home."



"...The answer is the meat-type hog..."

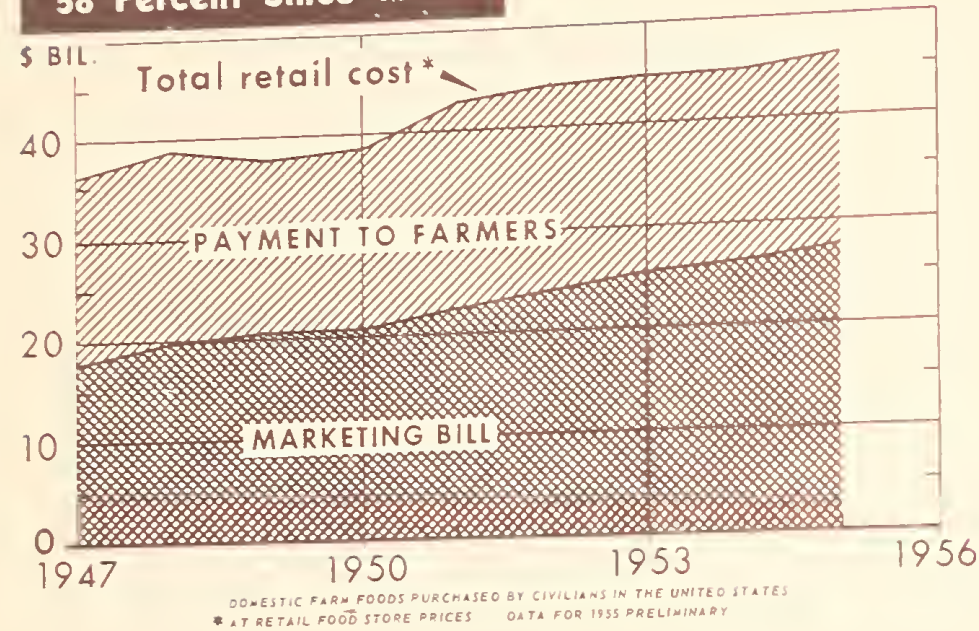




# Bill For Marketing Farm Products Continues Slow Rise

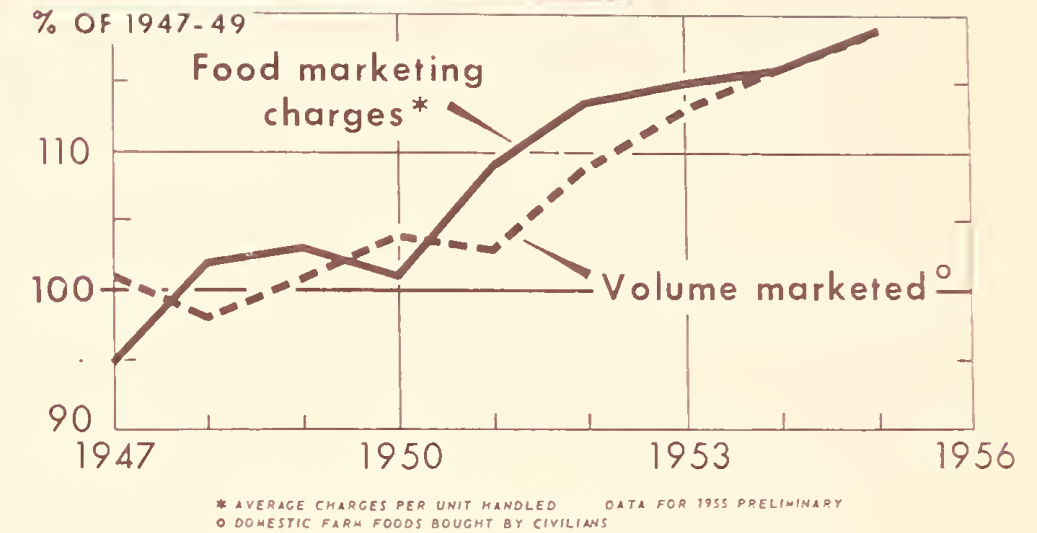
By Forrest Scott

## Food Marketing Bill Up 58 Percent Since 1947



The annual bill for marketing farm-produced food products bought by civilians charges from the time products leave the farm until they are sold in retail stores--increased steadily from 17 billion dollars in 1947 to 28.0 billion in 1955. (See charts on this page.) Rising charges per unit of product marketed larger volume marketed accounted for this increase. Charges rose mainly because of higher costs, but partly also resulted from more processing, packaging, and operations. By improving efficiency, some firms have to some extent higher prices of inputs. This is shown by the smaller increase in unit labor costs than in average hourly earnings of workers. Wage rates and prices of some other inputs probably will be moderate in 1956, and increases in unit marketing charges for food marketing bill are expected.

## Both Marketing Charges and Volume Marketed Increase



## Farmer's Squeezed

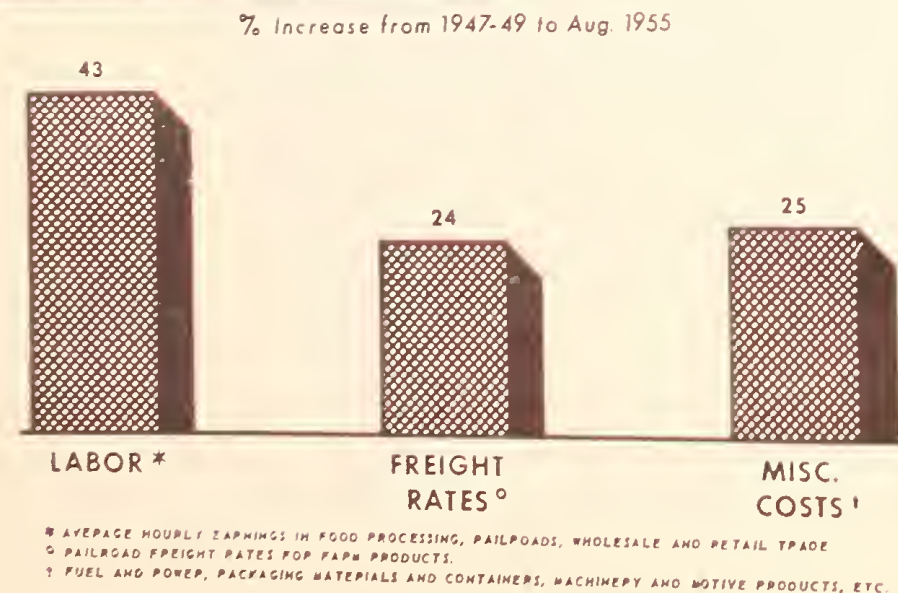
After rising much of the World War II, charges for marketing a basket of food products in 1955 are 19 percent above the 1947 level. But the farm value, or payment farmers receive for the equivalent farm products, is 15 percent less. Consequently, the farmer's share of the dollar consumed for these foods declined from 49 cents in 1947 to 41 cents in 1955.

Variations in the farm share from one group of products to another arise from differences in operations involved in marketing. The farm share is smallest for bakery and cereal products which require extensive processing and the largest for poultry and eggs which need comparatively little processing.

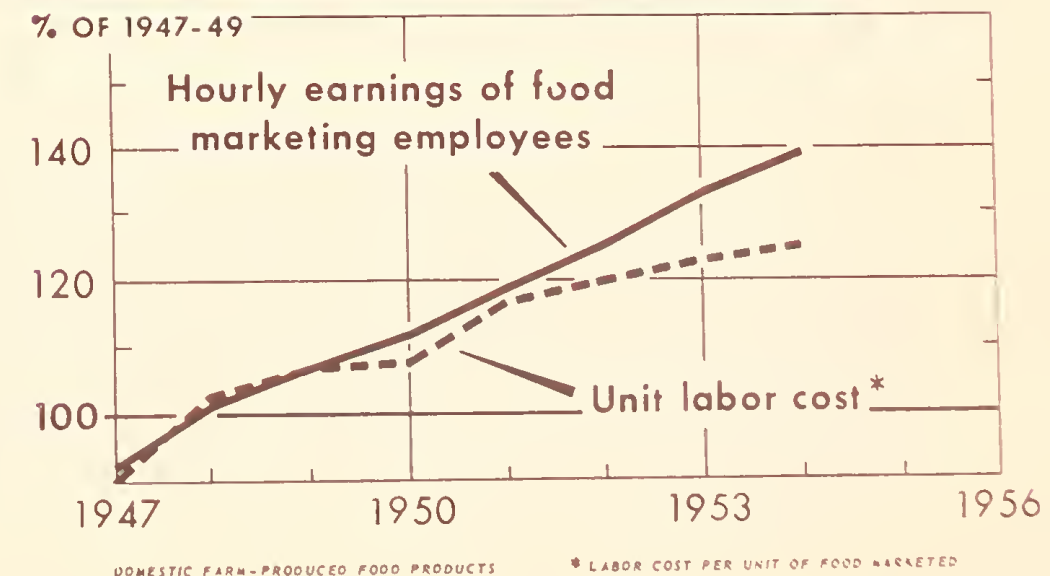
## Profits Get Stable

Net profits, after taxes, of leading food processing and distributing firms have been rather stable in recent years. Average ratios of profits to sales generally are lower than in the 1935-39 period but ratios of profits to stockholders' equity are higher. This results from the fact that sales have increased more than stockholders' equities since 1935-39.

## Costs of Food Marketing Firms Are Higher



## Labor Cost Up Less Than Hour Earnings, Indicating Higher Efficiency



# Truck Transportation Barriers, 1955

By Hugh S. Norton

Trucks moving from State to State are subject to many different laws on size and weight, taxes, and registration procedure. As the scope of truck operations expanded, in recent years, the laws and regulations affecting their movement have become more widely divergent. This situation has created serious problems for the trucking industry.

While few would question the necessity for laws limiting size and weight of vehicles and the need for imposing taxes, the lack of uniformity among the States poses special problems to shippers as well as truck operators. Farmers have a continuing interest in truck transportation as an ever expanding variety of agricultural products move to market predominantly by truck. The U. S. Department of Agriculture is concerned with the way in which truck transportation barriers influence the cost and efficiency of marketing farm products and hauling supplies to the farm.

At an early stage in the development of the motortruck, many States began to regulate the size and weight of vehicles operating on public highways to (1) assure safe operation of these vehicles on highways and streets, and (2) avoid excessively heavy weights on highways and bridges.

Since then, highway construction techniques have improved, and new concepts of traffic controls introduced. At the same time, trucks have increased in size. But pneumatic tires and advances in vehicle design have modified the weight problem, at least to a degree.

Changes in State laws, especially since 1940, reflect these improvements. Weight limits have been raised in almost all States, and similar progress has been made on length of vehicles, especially the tractor, semi-trailer combination.



Three-axle, tractor, semi-trailer combination.





3-Axle tractor, semitrailer combination, with mechanically refrigerated semitrailer.

However, there is substantial variation in State laws. For the 3-axle, tractor, semi-trailer combination--a popular interstate vehicle--weight limits range from 42,000 pounds in Kentucky to 65,400 pounds in the District of Columbia. For combinations having more axles, weight and size limits are generally higher. Although there is less variation in the laws on length, height, and width, there is enough difference to concern truck operators.

Obviously, truckers moving from State to State encounter many problems in accomodating their trucks to a wide range of limitations. The effect of this situation is reflected in many ways throughout the industry. In actual operation, truckers may refuse to enter certain areas where low-weight limits prevail, especially if the demand for trucking service is substantial in areas where greater pay loads can be carried. A regular route common carrier, of course, cannot refuse loads. He also cannot alter his route except for recognized cause. But the so-called "exempt carriers" may do so.

Thus, a low-weight State sometimes suffers a truck shortage if the neighboring States have higher limits and a heavy load of commodities must be moved. Weight limits particularly affect the availability of refrigerated trucks, which, because of insulation and cooling equipment, weigh more than dry-freight trucks.

Although length limitations are not so diverse as weight limitations, they still cause considerable difficulty for interstate truck operators. No State restricts tractor, semi-trailer combinations to less than 45 feet. Several western States allow 65 feet. Nevada has no limit.

Substantial differences in length limits create problems for long-distance operators. They limit the practice of interchanging trailers between different areas of the country. Long ago, railroads were able to, and did, develop the interchange of equipment to an amazing extent that is obvious to anyone watching, a passing freight train.

The types of vehicle combinations permitted by the various States are another problem. In the Far West, where length limits are generally more liberal than those prevailing in most of the eastern States, there are combinations in use which consist of a tractor, a semi-trailer, and a full trailer. Some other States do not permit a full trailer under any circumstances. And in many States, the length limit would preclude a full trailer in combination with a tractor and a semi-trailer.

The variation in State tax laws is another problem for motortruck operators. States generally increase fuel taxes and motor vehicle registration fees when additional revenue is needed to maintain and to construct highways. As the number of trucks and autos increased each year to new-record levels, the size of the tax yield increased.

But during and after World War II, highway construction and maintenance fell behind schedule. Additional revenue secured through larger registration fees and fuel taxes was not sufficient. The search for revenue turned toward weight-distance taxes in several of the States.

Such taxes are often called "third-structure" taxes. Registration fees and fuel taxes are first- and second-structure taxes, respectively. In general, weight-distance taxes are assessed on a ton-mile or axle-mile basis. They apply only to large vehicles. This type of tax is difficult to administer. It also has given rise to reciprocity problems.

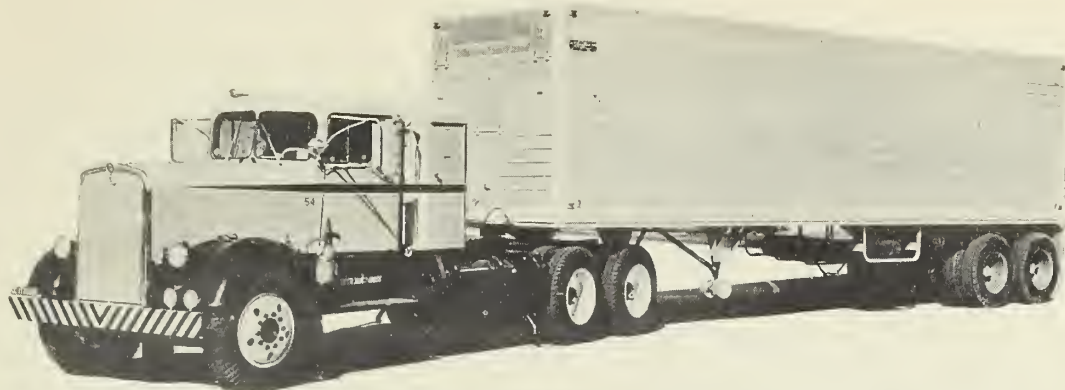
Reciprocity agreements among the various States mean that one State will recognize the vehicle license of other States. Then vehicles may pass from State to State without buying a license for each State along their route. The growth of interstate trucking has been aided substantially by these agreements. Truck operation today would be considerably more costly if it became necessary to register vehicles in each State in which a truck might be operated during the year.

When the weight-distance taxes were introduced, the question arose as to whether they would be subject to reciprocity. Where this was not the case, strained relations among the States often resulted. In some instances, the practice of reciprocity was placed in jeopardy.



4-Axle, tractor, tandem-semitrailer combination with ventilated semitrailer.





5-Axle, tandem-tractor, tandem-semitrailer, combination, with sleeper cab.

A lack of uniformity between reciprocity agreements has always existed. Generally, before the advent of the weight-distance tax, registration fees were covered by reciprocity agreement, and the trucker paid the tax on fuel when and where it was purchased. States imposing weight-distance taxes were reluctant to grant reciprocity since this would force them to tax their own trucks while "foreign" trucks escaped.

As most reciprocity agreements are made by executive action, they can easily be altered or cancelled. The terms of agreement are subject to bargaining among the States. Although relatively few States have actually taken steps toward a cancellation of reciprocity, the threat overhangs the whole system. For many truck operators, a widespread breakdown of reciprocity would mean a curtailment in interstate operations, or, at least, a substantial increase in operating costs.

While some truckers feel that vehicle taxes in various States should be reduced, differences in procedure and diverse tax bases are more often the principal reasons for complaints. This is especially true for the weight-distance tax as the trucker often complains that he must pay more to keep records and calculate the tax than the amount of his tax payment.

Some States require truck operators to file reports showing movements into and out of State. These reports are then audited by State officials, a process which is burdensome for the trucker and costly for the State. Under the New York State law, trucking firms outside the State must pay the audit costs, a practice which saves money for the State, but which doesn't appeal to the truckers. As an alternative, at least one other State has set up ports-of-entry on the main routes entering the State. Ports-of-entry are expensive to maintain and they sometimes create an element of ill will.

Because there is conflicting evidence, reasonable doubt exists as to how much the States actually benefit from the weight-distance tax. Opponents of the tax have pointed out that net revenue has frequently failed to reach expected levels and a substantial part of the revenue has been used in collection. On the other hand, States now imposing a weight-distance tax claim that it produces adequate revenue and that any shortcomings of the tax are the result of inexperience.



# Improved Methods Of Displaying Produce On Wet Racks

By F. S. Hapner

The time required to display produce on iced wet racks in retail food stores can almost be cut in half by the use of improved display methods. Tests conducted by the U. S. Department of Agriculture in 2 Miami, Fla., supermarkets reduced the time required to display 14 produce items by 39 percent.

Display time includes the activity of displaying and pricing performed at the display rack. It does not include the time to move to, within, and from the display area or pricing performed at any other point.

Table below shows the average number of pieces of each item displayed per week per store during two 1-week periods in two supermarkets of equal volume. Items were counted as new items the first time they were placed on display and as rehandled items each additional time they were displayed. It was necessary to rehandle 54 percent of the produce items displayed.

Average number of pieces of wet-rack produce handled per store per week  
in two Miami, Fla. supermarkets during two 1-week periods,  
January and June 1955

Item	: New produce items	: Rehandled items	: Total handled
	: <u>Number</u>	: <u>Number</u>	: <u>Number</u>
Boston lettuce	: 86	: 126	: 212
Green cabbage	: 228	: 137	: 365
Bulk carrots	: 263	: 191	: 454
Bag carrots	: 290	: 267	: 557
Celery	: 681	: 509	: 1,190
Chicory	: 91	: 98	: 189
Corn	: 1,357	: 342	: 1,699
Head lettuce	: 1,233	: 362	: 1,595
Mushrooms (pints)	: 53	: 52	: 105
Parsley	: 94	: 146	: 240
Parsnip (bags)	: 16	: 128	: 144
Red Radish	: 268	: 151	: 419
Romaine	: 107	: 99	: 206
Salad (bags)	: 122	: 71	: 193
Total	: 4,889	: 2,679	: 7,568

## Improved Banding

Substantial savings resulted from an improved method of banding lettuce and celery--a reduction in time of 47 and 45 percent for the 2 items. Based on the average number of pieces priced and displayed per week in the test store this resulted in a saving of 3.1 man-hours a week.

## Improved Handling

Additional savings in display time resulted from changing from the conventional method of displaying one piece at a time and passing it from hand to hand to an improved method of displaying two pieces at one time with one in each hand. Displaying with more than one in each hand reduced the control over positioning and required more additional time to straighten out the display than could be gained by the multiple carry. The decrease in display time varied from 14 percent for lettuce to 28 percent for corn. The table below compares the time required to display 6 wet-rack items with conventional hand-to-hand pass method with the improved method of one item in each hand (display without pricing):

Item	: Conventional	: Improved	: Decrease in time
	: Man-min. per piece	: Man-min. per piece	: Percent
Bag carrots	: .024	: .018	: 25
Celery	: .027	: .020	: 26
Corn	: .021	: .015	: 28
Escarole	: .027	: .022	: 18
Lettuce	: .022	: .019	: 14
Romaine	: .024	: .019	: 21



An improved method of banding

(Left) The lettuce head is picked up with the left hand, butt up or in the palm, thumb up, at the same time the band is picked up with the right hand. (Center) With the head in the palm of the hand and held by the thumb, the four fingers are opened and the band placed underneath the head with about one-third of it ahead of the fingers. (Right) Holding the end of the band with the right hand, close fingers of the left hand and clamp band to lettuce. Rotate left wrist to bring free end of band to meet end held in right hand. Grasp both ends and twist one full turn. Place on display.



Conventional display method



Improved display method

One piece at a time passed from hand to hand.

Two pieces at a time with one in each hand.

Items that are price marked or banded as displayed will, of necessity, use a variation of the hand-to-hand pass method. Large bulky items, such as cabbage, cannot be handled easily one in each hand. Items that are price marked or banded at another point and then displayed can take advantage of the two-handed method. But banding or pricing as a separate operation will require some additional time because of the extra handling involved.

### Proper Position of Container

Containers placed at a convenient working position alongside of rack will reduce display time further by shortening the distance traveled by the hands. It will also minimize extra body movements. The illustrations on page 19 show (1) an example of displaying from a container that is placed too far away and (2) a more convenient positioning of the container.

### Taking Down the Wet-Rack

A planned procedure for taking down the wet-rack at night will prove of benefit to the work involved in resetting the rack the next morning. When the rack was pulled at night, items that require retrimming, such as lettuce, celery, and romaine, were stored in containers on a separate handtruck from items that could be replaced on display without trimming. Items that do not require retrimming can be moved directly to the display area and placed on the rack. This eliminates the additional time formerly required to bring all the produce that was taken off display the previous night to the floor and to sort through the mixed containers.

The standard time per week required to price and display the 14 items with conventional methods was 684.3 man-minutes, or 11.4 man-hours. With the improved methods, standard time per week was reduced to 418.7 man-minutes or 7 man-hours. The total time saved per store for the 14 items was 4.4 man-hours per week. (See table on next page.)



Comparative time required to display 14 wet-rack produce items by conventional and improved methods in two Miami, Fla. supermarkets

Item	: Pieces : : handled :	Conventional		Improved	
		Per piece	Total per week	Per piece	Total per week
	: Number :	: Man-minutes :	: Man-minutes :	: Man-minutes :	: Man-minutes :
Boston Lettuce (1)	: 212 :	: .068 :	: 14.416 :	: .063 :	: 13.356 :
Cabbage	: 365 :	: .033 :	: 12.045 :	: .033 :	: 12.045 :
Carrots (bulk)	: 454 :	: .023 :	: 10.442 :	: .024 :	: 10.896 :
Carrots (bag)	: 557 :	: .027 :	: 15.039 :	: .018 :	: 10.026 :
Celery (2)	: 1,190 :	: .147 :	: 174.930 :	: .081 :	: 96.390 :
Chicory (1)	: 189 :	: .070 :	: 13.230 :	: .061 :	: 11.529 :
Corn	: 1,699 :	: .027 :	: 45.873 :	: .019 :	: 32.281 :
Lettuce (head) (2)	: 1,595 :	: .143 :	: 228.085 :	: .076 :	: 121.220 :
Mushrooms (pints)	: 105 :	: .040 :	: 4.200 :	: .036 :	: 3.780 :
Parsley	: 240 :	: .028 :	: 6.720 :	: .026 :	: 6.240 :
Parsnip (bagged) (3)	: 144 :	: .122 :	: 17.568 :	: .098 :	: 14.112 :
Red radish	: 419 :	: .057 :	: 23.883 :	: .027 :	: 11.313 :
Romaine (1)	: 206 :	: .108 :	: 22.248 :	: .070 :	: 14.420 :
Salad (bagged)	: 193 :	: .034 :	: 6.562 :	: .034 :	: 6.562 :
Total	: 7,568 :		: 595.241 :		: 364.170 :
Personal & Fatigue	:				
time (15 percent)	:		: 89.286 :		: 54.626 :
Standard Time	:		: 684.527 :		: 418.796 :

- (1) Price butt with pencil and display
- (2) Attach prepriced tie and display
- (3) Staple tag on bag and display



Containers placed too far away from display rack.



Containers placed at convenient working position alongside of display rack.

OFFICIAL BUSINESS

### WASHING POTATOES FOR EXTRA PROFIT



Sales increased about one fourth when a display of washed potatoes at a four-cent premium was added to the display of unwashed potatoes. Story on page 3.

